

CA

17

New alkaloid of *Colchicum speciosum*. A. A. Beier  
(Tsentral. Nauch.-Istselkovatel. Lesokhim. Inst. g.  
Khimii, Moskva, Ohl.). *Dobladý Alad.* Nauk. S.S.R.  
69, 309-71 (1949); cf. C.A. 44, 800b. --The new alkaloid *col-*  
*chicine* is extractable from the plant tubers after the fruit  
bearing period instead of colchicine. For isolation, the juice  
of the tubers is extd. with  $\text{CHCl}_3$ , and the evapd. ext. shaken  
with warm  $\text{H}_2\text{O}$ , followed by addn. of  $\text{NaOH}$ , reextn. with  
 $\text{CHCl}_3$ , evapn., and rubbing with dry  $\text{EtOAc}$ ; the product  
obtained in 0.07% yield forms colorless, bitter-tasting  
prisms, m. 187-7.5° (from  $\text{Me}_2\text{CO}$ ), having the compn.  
( $M/e$ )<sub>1</sub>  $C_{17}H_{20}O_4N$ .  $[\alpha]_D^{25} -300^\circ (\text{H}_2\text{O})$ . --  $[\alpha]_D^{25} (\text{CHCl}_3)$ ,  
-180° ( $\text{EtOH}$ ), -100° ( $\text{AcOH}$ ), sol. 4% in  $\text{H}_2\text{O}$ , very sol.  
in  $\text{CHCl}_3$ , and moderately sol. in warm  $\text{EtOAc}$ ; *chloroaurate*,  
m. 170-1.5°. It gives red-brown ppt. in the Wagner test,  
orange ppt. in the Dragendorff test, white ppt. with tannin,  
red color with alc.,  $\text{FeCl}_3$ , and green after  $\text{HCl}$  hydrolysis;  
gives a ppt. with picric acid, m. 129-31° (decompn.).  
The absorption spectrum is similar to that of colchicine.  
Hydrolysis with 0.25%  $\text{HCl}$  yields colchicine and an  
unidentified acid. Its toxicity is similar to that of  
colchicine. G. M. Kosolapoff

BENR, A. A.

*Chem Abs*  
V48, 25 Jan '54*Organic Chem*

Composition of colchicine and a new allotropic colchicine. V. V. Kitaev, G. P. Mintsikov, and V. N. Feser  
USSR Academy All-USSR Chem. Pharm. Inst., "Izdat. Akad. Nauk SSSR" 37, 227-231 (1954).  
Colchicine is a mixt. compd. of colchicine and a new allotropic form of colchicine (I). Colchicine rapidly  
decomps. on heating (ca.  $100^{\circ}$ ) to I. Chlorination rapidly  
decomps. ca.  $100^{\circ}$  effects the sepn. of the components,  
but not readily (no details given). I forms plates, m. 141-142  
(from EtOAc), fdp. 147-157° (CHCl<sub>3</sub>), solv. in H<sub>2</sub>O. When  
at 20°, it produces a yellow color with acids; while acid  
solutions give a green color with FeCl<sub>3</sub> only on heating. I/Mg  
m. 216-17° (decompn.); perchlorate, decomp. 261° (from  
H<sub>2</sub>O); Bz deriv., m. 200-10° (from EtOAc). Hence I is  
a secondary base, probably with a Me group on the N atom,  
in contrast to colchicine. An equimolar mixt. of I and col-  
chicine again yields "colchicerine", m. 157-8° (higher than  
the m.p. of its components). Apparently colchicerine is  
not identical with subsp. G from C. J. Tamm's monograph  
(cf. Santavy, 1951, 25, 215c) since the aromatic  
part of the latter is quite different from the above.

*Chem 7*  
*(4)*

Y  
REER, Aleksey Alekseyevich; RUBTSOV, Ivan Andrianovich; NAZAROV, I.N.,  
akademik, retsenzent; PREOBRAZHENSKIY, N.A., professor, retsenzent;  
BUKIN, V.N., professor, spetsredaktor; PRITYKINA, L.A., redaktor;  
GOTLIB, E.M., tekhnicheskiy redaktor

[Synthesis of vitamins] Sintez vitaminov. Moskva, Pishchepromizdat,  
1956. 258 p.  
(VITAMINS) (MIRA 10:1)

Distr: 4E4j/4E2c (j)

Telomeration reaction between ethylene and carbon tetrachloride. G. R. Chakravarthy, M. A. Rajarayamani,

and A. Bera. Kishin Nonaka (Chem. Lett. 1973) 1973-77.

Precursors of the ethylene-CCl<sub>4</sub> reaction were worked out.

By regulating the reaction conditions and especially the C<sub>2</sub>H<sub>4</sub>/CCl<sub>4</sub> ratio, polymers of desired mol. wt. can be obtained.

V. S. Mihajluk

1/15  
2-May  
2

BEYER, A.A.

<b>5 (J)</b> <b>AUTHORS:</b> Negirskiy, Ye.M., Candidate of Technical Sciences. <b>TITLE:</b> Scientific-Technical Conference and a Seminar on the Production and Processing of Chemical Fibers <b>PARTIODICAL:</b> Khimicheskaya Promst. i proizvodstvye, 1959, Vol. 4, No. 3. <b>ABSTRACT:</b> <p>In November-December 1958 the All-Union Scientific-Technical Conference on Problems of the Application of Chemical Fibers in the Particle Matrix was held in Kirovograd. The President of the Goumaztechiya Research and Development Association (Goumaztechiya) and chairman of the State Committee for Chemistry in the Council of Ministers of the USSR V.G. Fedorov pointed out the great importance of developing the production of artificial fibers. A. B. Ruzin (General Director of Kirovograd's Volzhskii Combine of Chemical Fibers) read a paper on the tasks of workers of the Combine of Chemical Fibers Read a paper on the tasks of workers of the Combine of Chemical Fibers.</p>	<b>Case 359</b> <p>In November-December 1958 the All-Union Scientific-Technical Conference on Problems of the Application of Chemical Fibers in the Particle Matrix was held in Kirovograd. The President of the Goumaztechiya Research and Development Association (Goumaztechiya) and chairman of the State Committee for Chemistry in the Council of Ministers of the USSR V.G. Fedorov pointed out the great importance of developing the production of artificial fibers. A. B. Ruzin (General Director of Kirovograd's Volzhskii Combine of Chemical Fibers) read a paper on the tasks of workers of the Combine of Chemical Fibers Read a paper on the tasks of workers of the Combine of Chemical Fibers.</p>
<b>Case 360</b> <b>Card 4/6</b> <p>In November-December 1958 the All-Union Scientific-Technical Conference on Problems of the Application of Chemical Fibers in the Particle Matrix was held in Kirovograd. The President of the Goumaztechiya Research and Development Association (Goumaztechiya) and chairman of the State Committee for Chemistry in the Council of Ministers of the USSR V.G. Fedorov pointed out the great importance of developing the production of artificial fibers. A. B. Ruzin (General Director of Kirovograd's Volzhskii Combine of Chemical Fibers) read a paper on the tasks of workers of the Combine of Chemical Fibers Read a paper on the tasks of workers of the Combine of Chemical Fibers.</p>	<b>Case 360</b> <b>Card 4/6</b> <p>In November-December 1958 the All-Union Scientific-Technical Conference on Problems of the Application of Chemical Fibers in the Particle Matrix was held in Kirovograd. The President of the Goumaztechiya Research and Development Association (Goumaztechiya) and chairman of the State Committee for Chemistry in the Council of Ministers of the USSR V.G. Fedorov pointed out the great importance of developing the production of artificial fibers. A. B. Ruzin (General Director of Kirovograd's Volzhskii Combine of Chemical Fibers) read a paper on the tasks of workers of the Combine of Chemical Fibers Read a paper on the tasks of workers of the Combine of Chemical Fibers.</p>
<b>Case 361</b> <b>Card 5/6</b> <p>In November-December 1958 the All-Union Scientific-Technical Conference on Problems of the Application of Chemical Fibers in the Particle Matrix was held in Kirovograd. The President of the Goumaztechiya Research and Development Association (Goumaztechiya) and chairman of the State Committee for Chemistry in the Council of Ministers of the USSR V.G. Fedorov pointed out the great importance of developing the production of artificial fibers. A. B. Ruzin (General Director of Kirovograd's Volzhskii Combine of Chemical Fibers) read a paper on the tasks of workers of the Combine of Chemical Fibers Read a paper on the tasks of workers of the Combine of Chemical Fibers.</p>	<b>Case 361</b> <b>Card 5/6</b> <p>In November-December 1958 the All-Union Scientific-Technical Conference on Problems of the Application of Chemical Fibers in the Particle Matrix was held in Kirovograd. The President of the Goumaztechiya Research and Development Association (Goumaztechiya) and chairman of the State Committee for Chemistry in the Council of Ministers of the USSR V.G. Fedorov pointed out the great importance of developing the production of artificial fibers. A. B. Ruzin (General Director of Kirovograd's Volzhskii Combine of Chemical Fibers) read a paper on the tasks of workers of the Combine of Chemical Fibers Read a paper on the tasks of workers of the Combine of Chemical Fibers.</p>

**APPROVED FOR RELEASE: 06/08/2000**

CIA-RDP86-00513R000205130001-9"

BEER, A.A.; BESPROZVANNYY, M.A.

Certain laws governing the distribution of individual compounds in  
a mixture of telomers. Khim.nauka i prom. 4 no.4:547-548 '59.  
(MIRA 13:8)

1. Gosudarstvennyy institut azotnoy promyshlennosti.  
(Polymerization)

S/204/62/002/004/017/019  
E075/E435

AUTHORS: Afanas'yev, I.B., Beer, A.A.

TITLE: Telomerization between ethylene and dihalogen derivatives of methane

PERIODICAL: Neftekhimiya, v.2, no.4, 1962, 611-616

TEXT: The telomerization of ethylene was investigated with  $\text{CH}_2\text{Cl}_2$ ,  $\text{CH}_2\text{Br}_2$ ,  $\text{CH}_2\text{ClBr}$  and  $\text{CHCl}_3$ . The experiments were conducted in an 11 litre autoclave using benzoyl peroxide as the reaction initiator. It was shown that the composition of the reaction products (reaction temperature 100 or 200°C) as given by J.Harmon et al (J. Amer. Chem. Soc., 72, 1950, 2213) is not correct in that  $\alpha,\alpha$ -dichloralkanes are formed and not  $\alpha,\omega$ -dichlor-alkanes. For  $\text{CH}_2\text{Br}_2$  telomerization, which is described by the authors for the first time, the reaction products are  $\alpha,\omega$ -chlorobromoalkanes. On the basis of the Walling equation (C.Walling, Free Radicals in Solution, 1957) the chain transfer constants were calculated for the four dihalogenomethanes. The values obtained confirm the applicability of the Taft equation. It was found that only  $\text{CH}_2\text{ClBr}$  and  $\text{CH}_2\text{Br}_2$  form

Card 1/2

Telomerization between ethylene ...

S/204/62/002/004/017/019  
E075/E435

$\alpha, \omega$ -dihalogenoalkanes, the first of the two being more attractive in view of its relative cheapness and greater suitability for the synthesis of aminoacids, aminoalcohols, diamines, diols, dicarboxylic acids and long-chain aminoacids. Using the methods of ammonolysis, cyanation and cyanomethylation in the presence of  $\text{NaNH}_2$  the authors synthesized nonamethylene diamine, undecamethylenediamine, azelaic acid, chlorenantic, chlorpelargonic and chlordecanoic acids and other compounds. There are 2 figures and 2 tables.

ASSOCIATION: Gosudarstvennyy institut azotnoy promyshlennosti  
(State Institute of the Nitrogen Industry)

✓

Card 2/2

S/204/62/002/004/018/019  
E075/E435

AUTHORS: Beier, A.A., Zagorets, P.A., Inozemtsev, V.F.,  
Povkh, G.S., Popov, A.I.

TITLE: Radio-chemical telomerization of olefines

PERIODICAL: Neftekhimiya, v.2, no.4, 1962, 617-623

TEXT: Additional data are presented on the telomerization between ethylene and carbon tetrachloride, and the reaction between tetrafluoroethylene and isopropylalcohol. The experiments were conducted in a thermostatically controlled autoclave at 16 to 100 atm pressure in the absence of oxygen. The ethylene -  $\text{CCl}_4$  mixture was irradiated with  $\gamma$ -rays from  $\text{Co}^{60}$  with the activity of about 350 g/equiv radium. The activity of the source for the  $\text{C}_2\text{H}_2\text{F}_4$  - alcohol mixture was 120 g/equiv radium. The molar ratio  $\text{C}_2\text{H}_4$  -  $\text{CCl}_4$  was varied from 0.2:1 to 3.8:1 and the reaction was studied at 20, 50 and 100°C. It was established that the content of individual telomers in the reaction product is given by the following approximate equations

$$F_1 = \frac{C_1 R}{C_1 R + 1}; F_2 = \frac{C_2 R}{(C_1 R + 1)(C_2 R + 1)}; F_3 = \frac{C_3 R}{(C_1 R + 1)(C_2 R + 1)(C_3 R + 1)}$$

etc.

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Radi-chemical telomerization ...

S/204/62/002/004/018/019  
E075/E435

where  $F_n$  is the molar proportion of telomer with  $n$  olefine residues,  $C_n$  - the chain transfer constant for the radical leading to the formation of telomer with  $n$  olefine residues and  $R$  - the molar ratio of telogen to olefine in the reaction mixture. When the ratio is changed from 3.8:1 to 0.2:1, a marked increase in the yield of tetrachloropropane is observed (from 3 to 5% to 63 to 100°C). The results were used in the development of radio-chemical plant with an output of 8 kg/hour of tetrachloroalkanes with Co source activity of about 15000 g-equiv radium in a reactor of 0.5 m<sup>3</sup> volume and 800 mm in diameter. Telomerization between C<sub>2</sub>H<sub>2</sub>F<sub>4</sub> and lower alcohols was studied at room temperature. The radio-chemical yield decreases in the series propanol-2 > butanol-1 > ethanol > butanol-2 > methanol. The reaction conditions were selected so as to eliminate completely the formation of high molecular weight compounds. There are 4 figures and 2 tables.

ASSOCIATION: Moskovskiy khimiko-tehnologicheskiy institut im. Mendeleyeva (Moscow Institute of Chemical Technology imeni Mendeleyev)

Card 2/2

BEYER, A. Ya.; DUBROVSKIY, P.A.

Some results of the operation of UDAR-3 radioactive level  
gauges. Transp. i khran. nefti i nefteprod. no. 4829-33\*64  
(MIRA 17\*7)

1. Odesskaya perevalochmaya neftebaza.

*B.A. BEYER, R.A.*

BEYER, B.A., prof. (Leningrad)

S.P.Botkin's views in hematology and their elaboration by Soviet clinical medicine. Klin.med. 35 no.8:61-68 Ag '57. (MIRA 10:11)

1. Is kafedry fakul'tetskoy terapii (nach. - prof. B.A.Beyer)  
Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Koriva.  
(HEMATOLOGY)

contribution of Sergei P.Botkin & present develop.  
of his ideas)

BEYER T. V. (Leningrad)

"Immunity in experimental coccidiocosis of rabbit caused by heavy infective doses of *Eimeria intestinalis*."

Report presented at the 13th Annual meeting and 1st International Conference of Society of Protozoologists, Prague, 22-31 Aug 61

BEYEV, D.A., kandidat tekhnicheskikh nauk

Using the humps of marshalling yards for routine railroad car repair.  
Tehn.zhel.dor.6 no.8:12-14 Ag'47. (MIRA 8:12)  
(Railroads--Cars--Maintenance and repair)

BEYEV, Dmitriy Aleksandrovich, kandidat tekhnicheskikh nauk; GALUTVINA,  
Tat'yana Konstantinovna, inzhener; SOMOLOV, Petr Petrovich, inzhener;  
SELIKHOVA, T.A., inzhener, redaktor; KHITROV, P.A., tekhnicheskiy  
redaktor

[Mechanizing the repairing of passenger cars; experience of car  
repairing plants and depots] Mekhanizatsiya rabot pri remonte  
passazhirskikh vagonov; opyt vagonoremontnykh zavodov v depo.  
Moskva, Gos. transp. zhel-dor. izd-vo 1956. 179 p. (MLRA 9:11)  
(Railroads--Cars--Repairing)

BEYER, F.

Yugoslavia (430)

Agriculture-Plant and Animal Industry

Motorboats and fuel used in fishing p. 75.  
MORSKO RIBARSTVO, Vol. 4, no. 5, 1952.

East European Acquisitions List, Library of  
Congress. Vol. 2, no. 3, March 1953. UNCLASSIFIED

"APPROVED FOR RELEASE: 06/08/2000

CIA-RDP86-00513R000205130001-9

HEYER, F.

"Electrical lighting of fishing boats", p. 24 (Morsko Ribarstvo, Vol. 5, no. 1/2, 1953, Zagreb)

SO: Monthly List of East European Accessions, Vol. 2, No 9, Library of Congress, September 1953, Uncl.

APPROVED FOR RELEASE: 06/08/2000

CIA-RDP86-00513R000205130001-9"

CZECHOSLOVAKIA/Nuclear Physics - Nuclear Power and Technology.

C

Abs Jour : Ref Zhur Fizika, No 1753<sup>4</sup>

Author : Beyer, Frantisek; Stach, Vaclav

Inst :                   
Title : Intensification of Heat Transfer in a Nuclear Reactor  
with Gas Cooling.

Orig Pub : Jaderna energie, 1958, 4, No 9, 251-256

Abstract : The authors investigate the possibility of increasing the heat transfer from the surface of the fuel element to the cooling gas. On the basis of experiments carried out outside the reactor, it has been determined that the increase in the heat transfer is possible by producing an intensive electric field around the heat-producing surface. During the intensification of the heat transfer in the cooling channel of the nuclear reactor, an analogous phenomenon takes place. Inasmuch as the gas in the reactor is partially ionized by the radiation, it is enough to

Card 1/2

- 40 -

CZECHOSLOVAKIA/Nuclear Physics - Nuclear Power and Technology. C

Abs Jour : Ref Zhur Fizika, No 8, 1959, 1753<sup>4</sup>

use the low voltage to obtain the required effect. Experiments are carried out with a loop of the experimental reactor of the Institute of Nuclear Physics using air cooling. The experiments confirm the possibility of a substantial increase in the heat transfer by the foregoing method.

Card 2/2

BL4ER, 6.

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PHASE I BOOK EXPLOITATION

SOV/6246

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primeneniye  
(Synthetic Zeolites: Production, Investigation, and Use). Mos-  
cow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady)  
Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh  
nauk. Komisiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor  
of Chemical Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P.  
Golub'.

PURPOSE: This book is intended for scientists and engineers engaged  
in the production of synthetic zeolites (molecular sieves), and  
for chemists in general.

Card 1/M 3

Synthetic Zeolites: (Cont.)

SOV/6246

COVERAGE: The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensovet, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites, and 3) application of zeolites. No personalities are mentioned. References follow individual articles.

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Foreword

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Dubinin, M. M. Introduction

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## Synthetic Zeolites: (Cont.)

SOV/6246

- Pavlova, S. N., Z. V. Driatskaya, and M. A. Mkhchiyan.  
Application of Synthetic Zeolites in Determining the  
Content of Normal Alkanes in Gasoline Fractions 253
- Galich, P. N., I. T. Golubchenko, A. A. Gutryra, V. S.  
Gutryra, and I. Ye. Neymark. Investigation of the  
Possible Application of Synthetic Zeolites as Carriers  
and Catalysts for the Dehydrogenation and Cracking of  
n-Paraffins 260
- Palek, M., P. Iru, O. Grubner, and G. Beyer.  
Synthetic Zeolites as Molecular Sieves With Color  
Indication of Water-Vapor Pressure 263
- Malyusov, V. A., N. N. Umnik, N. N. Kulov, N. M. Zhavoronkov,  
G. I. Faydel', and D. O. Zisman. Purifying Formaldehyde  
From Moisture and Formic Acid With the Aid of Synthetic  
Zeolites 267

Card ~~Machine~~ 3/3

BEYER, Gerhard, inz. dr.

Effect of liquid substances on the separation in ball mills.  
Rudy 12 no.7/8296-298 Jl-Ag'64  
(MIRA 17:8)

1. VEB, Werra Potash Plant, Merkers, German Democratic Republic.

BEYER, H.; VALOUCH, L.

Testing a chopper-thresher.

p. 97 (*Zemelédske Stroje*) Vol. 2, no. 5, May. 1957 Praha, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

HUNGARY / Organic Chemistry. Synthetic Organic Chemistry.

G-2

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 77696.

Author : Beyer, H.

Inst : Hungarian Academy of Sciences.

Title : New Developments in the Chemistry of Thiazole.

Orig Pub: Acta Chim Akad Sci Hung, 12, No 3-4, 325-330 (1957)  
(in German with summaries in English and Russian).

Abstract: The condensation of  $\alpha$ -halogen ketones and thiosemicarbazones theoretically should yield 2-hydrazinothiazoles (I), 3-amino-2-imide-thiazalones (II), and 2-amino-1,3,4-thiadiazines (III). It has been found that I is obtained in neutral medium, while III is formed in 1-2 N HCl; the reaction with conc HCl gives II. Mechanisms for the

Card 1/2

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HUNGARY / Organic Chemistry. Synthetic Organic Chemistry.

G-2

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 77696.

Abstract: synthesis are given and the procedures used in establishing the structure of the final products and of the intermediates obtained are described.  
-- P. Sokov.

Card 2/2

44861

S/081/62/000/024/020/073  
B117/B1863.1152  
AUTHORS: Rálek, M., Yíru, P., Grubner, O., Beyer, H.

TITLE: Molecular sieves with color indication of the humidity content

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24, 1962, 150,  
abstract 24B1021 (Collect. Czechosl. Chem. Comms, v. 27,  
no. 1, 1962, 142-146 [Ger.; summary in Russ.])

TEXT: A study was made of a molecular sieve (MS) of the type Ag-A (MSI) which had been obtained by mixing a MS suspension of the type Na-A (MSII) with an 0.2 N  $\text{AgNO}_3$  solution at 25°C. In both MS the X-ray picture of the MSI with 100% substitution of  $\text{Na}^+$  by  $\text{Ag}^+$  shows identical crystal lattices. It has been found by thermal differential analysis that at 235°C MSI separates the sorbed water. At 560°C a second exothermal region can be observed which is probably connected with the recrystallization in the MSII lattice caused by the presence of  $\text{Ag}^+$ . At 900°C a new endothermal region was obtained which is typical of MSI only. Under dynamic conditions, at

Card 1/2

L 45342-66 EWP(j) RM  
ACC NR: AT6033595

SOURCE CODE: HU/2502/66/047/001/0013/0022

AUTHOR: Beyer, Hermann--Beyer, Kh. (Doctor; Budapest); Fejes, Pal--Feyesh, P. (Doctor);  
Schay, Geza--Shay, G. (Professor; Doctor); Varga, Karoly

ORG: Central Research Institute for Chemistry, MTA, Budapest

25  
871

TITLE: New investigations in the field of frontal gas chromatography taking into account the flow rate during sorption. Part 3: Determination of theoretical plate height values with the aid of frontal gas chromatography [This paper was presented at the All-Union Conference on Gas Chromatography in Moscow in May 1964.]

SOURCE: Academia scientiarum hungaricae. Acta chemica, v. 47, no. 1, 1966, 13-22

TOPIC TAGS: gas chromatography, sorption

ABSTRACT: An expression was derived for the characterization of the height of the theoretical plate for the frontal variant in gas chromatography and the values obtained with the aid of this expression were compared with data obtained by means of elution chromatography. Orig. art. has: 3 figures and 11 formulas. [Orig. art. in German] [JPRS: 34,669]

SUB CODE: 07 / SUBM DATE: 01Mar65 / ORIG REF: 003 / OTH REF: 004

Card 1/1 LC

0930 1638

i 43343-66 (MPC) 110(4) RR  
ACC NR: AT6033596

SOURCE CODE: HU/2502/66/047/001/0023/0035

AUTHOR: Varga, Karoly (Budapest); Fejes, Pal--Feyesh, P. (Doctor; Budapest);  
Beyer, Hermann--Beyer, Kh. (Doctor; Budapest)

ORG: Central Research Institute for Chemistry, MTA, Budapest

24  
B+1

TITLE: New investigations in the field of frontal gas chromatography taking into account the flow rate during sorption. Part 4: Evaluation of chromatographic partition columns on the basis of transport rates determined by frontal chromatography and diffusion constants

SOURCE: Academia scientiarum hungaricae. Acta chemica, v. 47, no. 1, 1966, 23-35

TOPIC TAGS: gas chromatography, sorption

ABSTRACT: Methods for the determination of the transport rate and diffusion constants of gas-chromatographic partition columns were described and means for evaluating such columns as to their performance characteristics other than selectivity on the basis of these data were developed. The data obtained on various packed columns were presented and discussed in detail. Orig. art. has: 1 figure, 7 formulas and 1 table. [Orig. art. in German] [JPRS: 34,669]

SUB CODE: 07 / SUBM DATE: 01Mar65 / ORIG REF: 009 / OTH REF: 001

Card 1/1 L

L 45342-66 EWP(j) RM  
ACC NR: AT6033595

SOURCE CODE: HU/2502/66/047/001/0013/0022

AUTHOR: Beyer, Hermann--Beyer, Kh. (Doctor; Budapest); Fejes, Pal--Feyesh, P. (Doctor);  
Schay, Geza--Shay, G. (Professor; Doctor); Varga, Karoly

25  
871

ORG: Central Research Institute for Chemistry, MTA, Budapest

TITLE: New investigations in the field of frontal gas chromatography taking into account the flow rate during sorption. Part 3: Determination of theoretical plate height values with the aid of frontal gas chromatography [This paper was presented at the All-Union Conference on Gas Chromatography in Moscow in May 1964.]

SOURCE: Academia scientiarum hungaricae. Acta chemica, v. 47, no. 1, 1966, 13-22

TOPIC TAGS: gas chromatography, sorption

ABSTRACT: An expression was derived for the characterization of the height of the theoretical plate for the frontal variant in gas chromatography and the values obtained with the aid of this expression were compared with data obtained by means of elution chromatography. Orig. art. has: 3 figures and 11 formulas. [Orig. art. in German] [JPRS: 34,669]

SUB CODE: 07 / SUBM DATE: 01Mar65 / ORIG REF: 003 / OTH REF: 004

Card 1/1 LC

0920 1638

45041-60 (P-1) 1.12(S) 6/2  
ACC NR: AT6033596

SOURCE CODE: HU/2502/66/047/001/0023/0035

AUTHOR: Varga, Karoly (Budapest); Fejes, Pal--Feyesh, F. (Doctor; Budapest);  
Beyer, Hermann--Beyer, Kh. (Doctor; Budapest)

ORG: Central Research Institute for Chemistry, MTA, Budapest

TITLE: New investigations in the field of frontal gas chromatography taking into account the flow rate during sorption. Part 4: Evaluation of chromatographic partition columns on the basis of transport rates determined by frontal chromatography and diffusion constants

SOURCE: Academia scientiarum hungaricae. Acta chemica, v. 47, no. 1, 1966, 23-35

TOPIC TAGS: gas chromatography, sorption

ABSTRACT: Methods for the determination of the transport rate and diffusion constants of gas-chromatographic partition columns were described and means for evaluating such columns as to their performance characteristics other than selectivity on the basis of these data were developed. The data obtained on various packed columns were presented and discussed in detail. Orig. art. has: 1 figure, 7 formulas and 1 table. [Orig. art. in German] [JPRS: 34,669]

SUB CODE: 07 / SUBM DATE: 01Mar65 / ORIG REF: 009 / OTH REF: 001

Card 1/1 2/

CZECHOSLOVAKIA

GOLDA, V.; ULLSPERGER, P.; BEYER, L.; PETREK, J.; LISONEK, P.;  
Laboratory of HNA, Medical Faculty, Palacky University, Olomouc;  
Institute of Anatomy, Medical Faculty, Palacky University, Olomouc.  
Original version not given.

"Laterality of Forelegs in Cats Determined by Two Different Tests."

Prague, Activitas Nervosa Superior, Vol 8, No 2, Jun 66, pp 181-182

Abstract: Laterality was determined by the Cole test and the Grastyán-Molnar tests. 12 cats were studied in 10 sessions, each with 25 trials. 10 cats showed statistically different results in the 2 tests. A significantly higher variance in results was shown in the second test. In the first method the prevalence of one limb is more pronounced; 10 cats showed laterality in 80% of experiments, while only 3 cats showed a definite laterality in the second test. No references. Submitted at the 4th Interdisciplinary Confer. of Exper. and Clin. Study of Higher Nerv. Functions at Mariánské Lázně, 12-15 Oct 65. Article is in English.

1/1

## CZECHOSLOVAKIA

GOLDA, V.; BEYER, L.; ULLSPERGER, P.; PETREK, J.; LISONEK, P.;  
Laboratory of HNA, Medical Faculty, Palacky University, Olomouc;  
Institute of Anatomy, Medical Faculty, Palacky University, Olo-  
mouc. [Orig. version not given].

"Laterality in the Formation of Conditioned Gripping Reflexes in  
Cats."

Prague, Activitas Nervosa Superior, Vol 8, No 2, Jun 66, pp 182-183

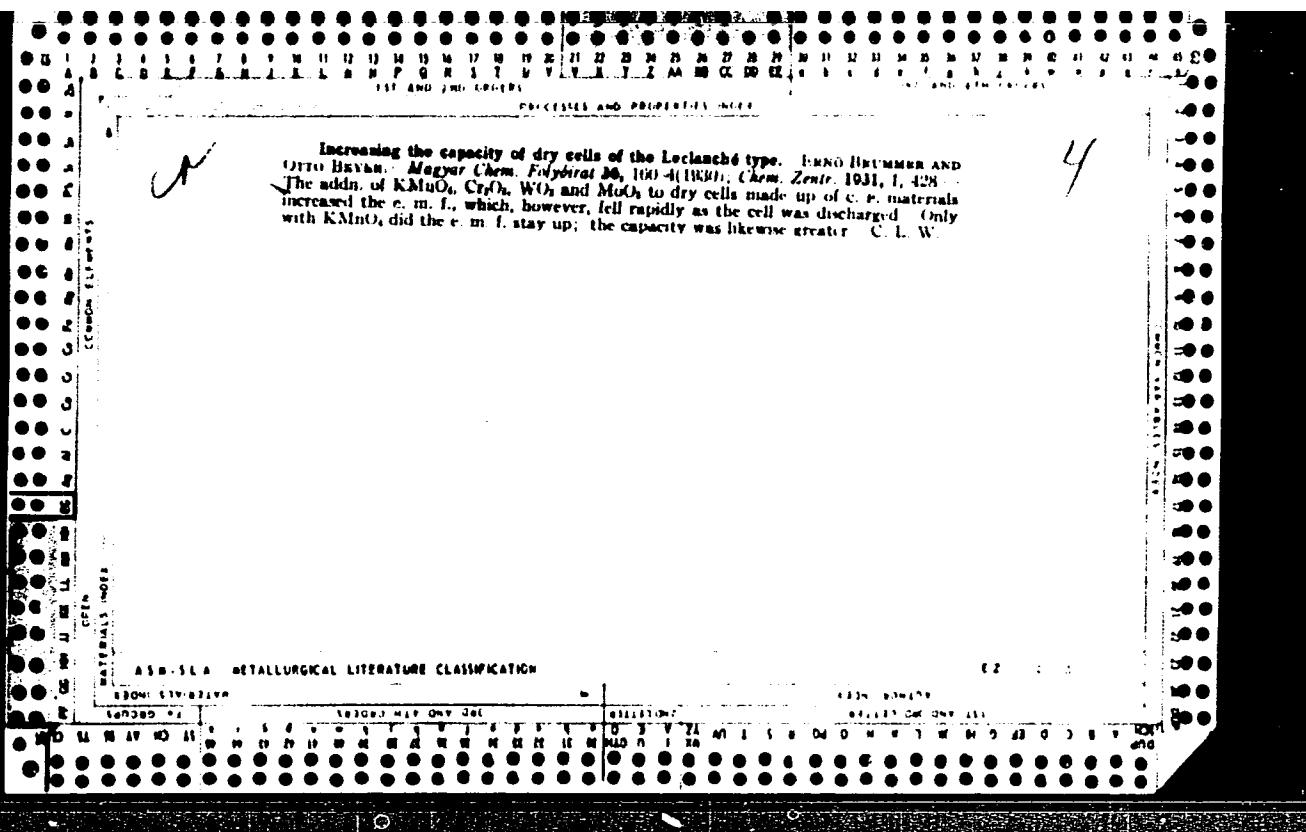
Abstract: The formation of conditioned reflex laterality de-  
pends on the conditions of the experimental situation. During the  
formation of the reflex 20 pairs of conditioned and unconditioned  
stimuli were presented at 1-2 minute intervals during each session.

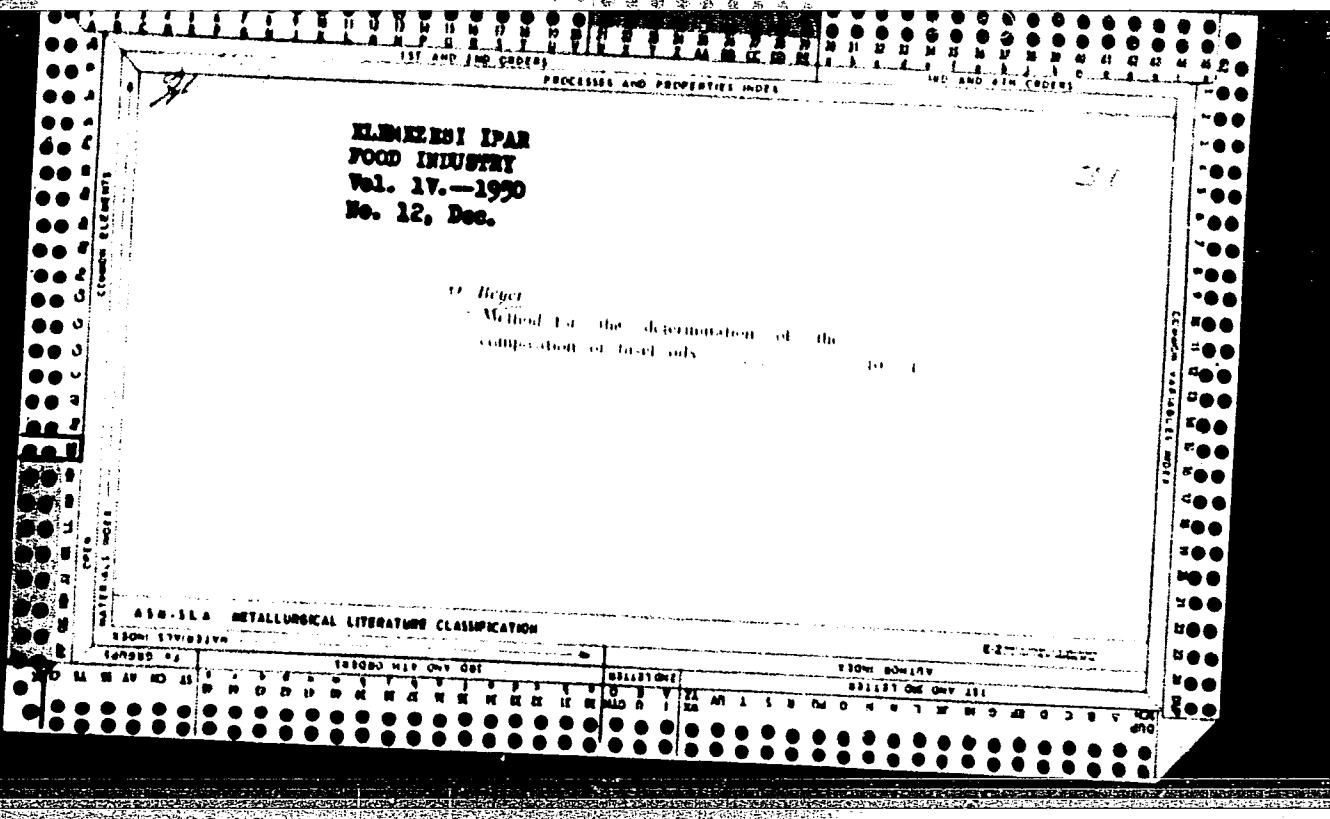
A marked difference between responses of the dominant and non-  
dominant forelegs in the percentage of correct reactions was found.  
In spontaneous responses in laterality tests, laterality is more  
marked than in the complex situation of conditioned reflexes. With  
progressive training in laterality tests, it becomes more pronounced;  
in conditioned reflexes it disappears. No references. Submitted  
at the 4th Interdisciplinary Confer. of Exper. and Clin. Study of  
Higher Nerv. Functions at Mar. Lazne, 12-15 Oct 65. Article is in  
English.

1/1

BEYER, M.

"Changes in brillianc~~e~~ of variables with periods of 30 to 150 days"  
Reviewed by Uu. I. Yefremov.  
Per. zvezdy 8, no. 2, 1951





BEYER, Robert

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: MD

Affiliation: ZUNZ NHKG /Zavodni ustav narodniho zdravi, Nova hut Klementa Gottwalda; Enterprise Institute of Public Health, Klement Gottwald Metallurgical Works/, Ostrava-Kuncice; Director: Zdenek

Source: VICH, MD.

Prague, Prakticky Lekar, Vol 41, No 8, 1961, pp 372-373.

Data: "Our Experience With Health Education in Metallurgical Plants."

BAYER, R.T.

46-4-2-13/20

AUTHORS: Beyer (Bayer), R.T., and Narasimhan (Narasimhan), V.

TITLE: On Absorption of Ultrasonic Waves of Finite Amplitude in Liquids  
(O pogloschenii ul'trazvukovykh voln konechnoy amplitudy v  
zhidkostyakh)

PERIODICAL: Akusticheskiy Zhurnal, 1958, Vol IV, Nr 2, pp. 196-197 (USSR)

ABSTRACT: Theory of propagation of finite-amplitude waves in gases was first discussed by Fay (Ref 1). According to this theory, which is also applicable to liquids, the coefficient of absorption increases on increase of acoustic pressure. This effect is due to displacement of sound energy to higher harmonics because of non-linearity of the medium and non-linearity of the exact equation of motion. An approximate analysis (due to P.B. Lindsey, unpublished) showed that increase of  $\alpha/\nu^2$  (where  $\nu$  is the acoustic frequency) is directly proportional to acoustic pressure  $p_a$  and inversely proportional to frequency  $\nu$ . The present authors recently showed (Ref 6) that increase of  $\alpha/\nu^2$  in water is an approximately linear function of  $p_a/\nu$  at high values of  $p_a/\nu$ . A figure on p. 196 shows the

Card 1/3

46-4-2-13/20

## On Absorption of Ultrasonic Waves of Finite Amplitude in Liquids

results of the measurements made at frequencies from 3.8 to 8.7 Mc/s. The results obtained by Zaremba et al. (Ref 5) for water at 1.5 Mc/s are also given in this figure (crosses). The graph shows that the results of Ref 7 agree well with the authors' results (published in Ref. 6). An additional verification may be made by an analysis given by Fox and Wallace (Ref 2) who obtained an equation  $\alpha/\nu^2 = \alpha_0/\nu^2 + K$ , where  $\alpha$  and  $\alpha_0$  are the absorption coefficients at finite and infinitesimally small amplitudes respectively and  $K$  is a correction.  $K$  depends on a coefficient of energy transfer from the fundamental frequency to the harmonics, on empirically determined coefficients in the quadratic equation of state for the liquid and on mean density of the liquid. Following Fox and Wallace the present authors calculated the slope of the dependence of  $\alpha/\nu^2$  on  $p_a/\nu$  for water. This calculated slope was found to be  $1.5 \times 10^{-15} \text{ sec.cm}^{-1} \cdot (\text{Mc/s})^{-1} \cdot \text{atm}^{-1}$  compared with the experimental value, as given in the graph, of  $2 \times 10^{-15}$ . In view of approximations of Ref 2 this agreement between experiment and theory is excellent. The figure shows that the experimental curve departs from the straight line at small values of  $p_a/\nu$  since it is in this region that the approximations made have the greatest effect. The experimental value Card 2/3 of  $\alpha$  depends also on the place where it is measured (the authors are

On Absorption of Ultrasonic Waves of Finite Amplitude in Liquids 46-4-2-13/20

indebted to V.A. Krasil'nikov who pointed out this fact); the values given in the present note are the maximum values of  $\alpha$ . There is one figure and 6 references, 5 of which are American and 1 Soviet.

ASSOCIATION: Fizicheskiy Departament Braunovskogo universiteta, Providens, SShA  
(Physics Department, Brown University, Providence, U.S.A.)

SUBMITTED: November 16, 1957

Card 3/3    1. Waves—Absorption    2. Waves—Propagation—Theory

SEYRA, V.

Business accounting and its use in establishments supplying parts for assembling structural units. p. 71.

Vol. 4, no. 2, Feb. 1956  
POZEMNI SPOVĚDY  
Praha, Czechoslovakia

Source: East European Accession List. Library of Congress  
Vol. 5, No. 3, August 1956

BEYER, V.A.

Nikolai Iakovlevich Chistovich; on the 100th anniversary of his  
birth. Terap.arkh. 33 no.3:110-113 Mr '61. (MIRA 14:3)  
(CHISTOVICH, NIKOLAI IAKOVLEVICH, 1860-)

BEYER, V.A., prof.; KLYACHKIN, L.M.

Report on the activity of the Hematological Section of the  
Leningrad S.P. Botkin Society of Therapeutists in 1962.  
Probl. gemat. i perel. krovi 9 no.1:59-60 Ja '64.

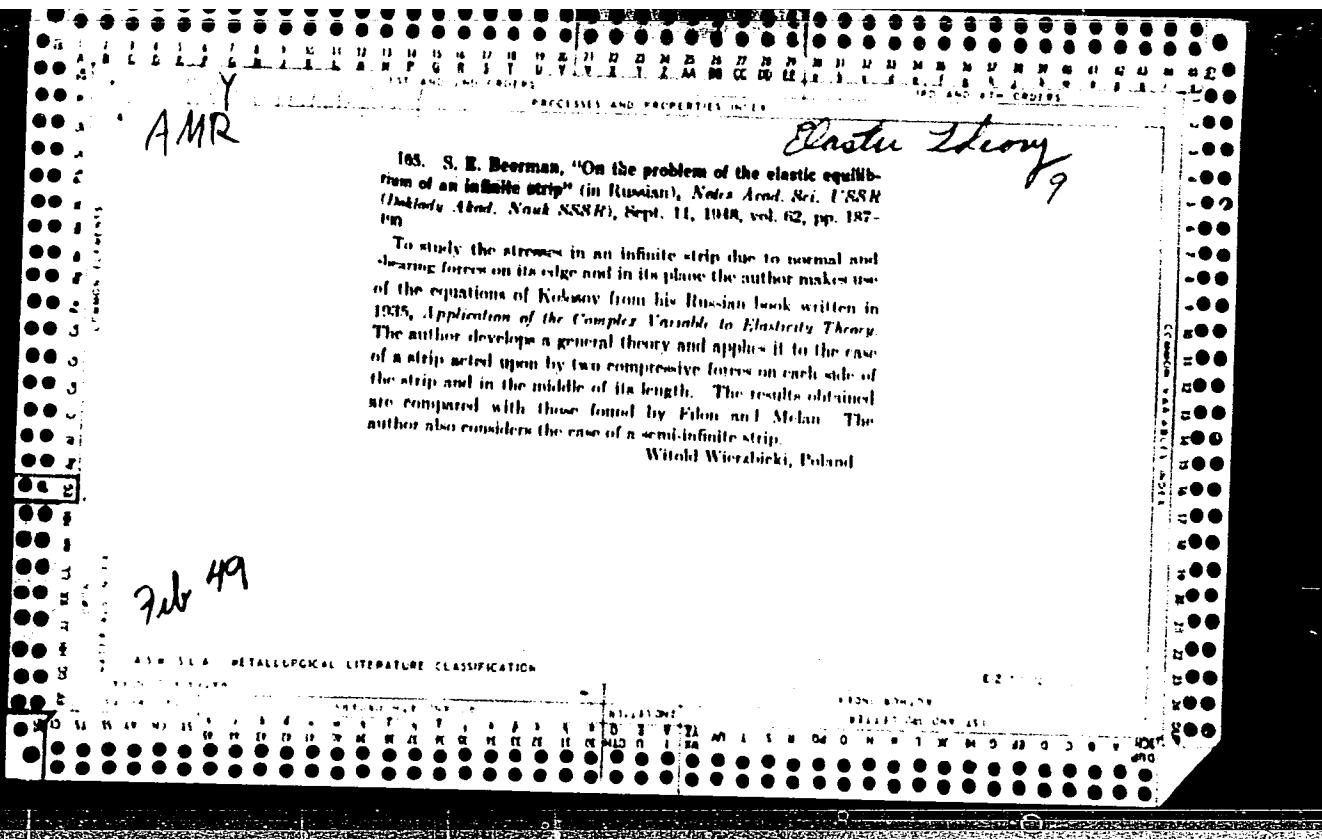
(MIRA 18:1)

1. Predsedatel' sektsii Leningradskogo obshchestva terapevtov  
imeni S.P. Botkina (for Beyer). 2. Sekretar' sektsii Lenin-  
gradskogo obshchestva terapevtov imeni S.P. Botkiha (for Klyach-  
kin).

HEYER, Vladislav

Trend of the technical development of enterprises associated with the Regional Association of Building Industry National Enterprises in Usti nad Labem. Poz stavby 13 no.1:3-7 '65.

1. Regional Association of Building Industry National Enterprises, Usti nad Labem.



AMR

100. S. E. Boerman, "Problems on thin-walled members" (in  
Russian), *Notes Acad. Sci. USSR (Doklady Akad. Nauk SSSR)*,  
Sept. 21, 1948, vol. 62, pp. 305-308.

The stress distribution in thin-walled members is investigated  
as a problem in plane stress. Neglecting local flexure, the con-  
tinuity along the various joints of the component thin plates is es-  
tablished by shear stresses exclusively. The paper actually con-  
sists of the solution of two specific problems: (1) a thin-walled  
square member acted upon by purely torsional moments arbitrarily  
distributed longitudinally, and (2) a thin-walled L-section  
built-in at one end and loaded along the top of the web by longitudi-  
nal external loads, linearly increasing. Deviations are  
highly condensed and for nomenclature reference is made to a  
previous article (*Notes Acad. Sci. USSR (Doklady Akad. Nauk  
SSSR)*, Sept. 11, 1948, vol. 62, p. 187; see Rev. 105, this issue  
*Applied Mechanics Reviews*), which is not available to the  
reviewer.

It would be interesting to compare the author's results with  
those obtained from the elementary solution of such problems by  
Ehlers and Cremer, which has long been in use in Germany in re-  
inforced concrete design (see "Flipped plate construction," Gero  
Winter and M. Pei, *J. Amer. concr. Inst.*, vol. 18, no. 5; see Rev.  
100, *Applied Mechanics Reviews*, January 1948). However,  
omission of nomenclature and details of derivation make such a  
comparison impossible. George Winter, USA

Elasticity  
Theory  
9

Feb 49

100

USSR/Electricity BEYEV, N. A.

Card 1/1

FD 233

Author : Beyev, N. A. [deceased], and Rezvyakov, A. P., Active Member, VNORIE  
Title : Two-wire transit connections for high-frequency telephone channels  
Periodical : Radiotekhnika 9, 68-76, Mar/Apr, 1954  
Abstract : Considers conditions for the stable operation of high-frequency telephone channels for one or several transceiver sections with two-wire transit connections. Proves that a two-wire transit connection under proper conditions can be in practice equivalent to a four-wire system. Gives requirements for the low-frequency portion of the equipment. Two references: 2 USSR.  
Institution : All-Union Scientific and Technical Society of Radio Engineering and Electric Communications imeni A. S. Popov (VNORIE)  
Submitted : Jan 31, 1953

ZABORENKO, K.B.; BABESHKIN, A.N.; BYEVSKA, V.A.

Application of the emanation method in the study of processes  
taking place in solids during heating. Radiokhimia 1 no.3:  
336-345 '59. (MIRA 12:10)  
(Chemistry, Physical and theoretical)  
(Barium sulfate) (Barium carbonate)



BEYGA, V.I.

New furniture models of the Experimental Design Office of the  
Lithuanian Economic Council. Der. prom. 14 no.7:19-20 Jl '65.

(MIRA 19:1)

1. Eksperimental'no-konstruktorskoys byuro Soveta narodnogo  
khozyaystva Litovskoy SSR.

BEYGEL', M.

Vitel and urgent work. Posh.delo 3 no.1:5-6 Ja '57.

1. Nachal'nik organa Gosudarstvennogo pozharnogo nadzora upravleniya posharnoy okhrany Bashkirskej ASSR.  
(MLRA 10:4)  
(Bashkiria--Fire prevention)

BEYGEL', Z., nauchnyy sotrudnik; TALESNIK, Ye., nauchnyy sotrudnik;  
DUSHNOV, Yu., nauchnyy sotrudnik; PARKHOMOVSKAYA, B., nauchnyy  
sotrudnik; GLUZMAN, M., nauchnyy sotrudnik

Effectiveness of manufacturing highly prefabricated reinforced  
concrete elements and joiner's articles. Zhil. stroi. no.1;  
5-7 '64. (MIRA 18:11)

1. Nauchno-issledovatel'skiy institut zhelezobetonnykh izdeliy  
stroitel'nykh i nerudnykh materialov Glavnogo upravleniya  
promyshlennosti stroitel'nykh materialov i stroitel'nykh  
detaley.

BEYGEL'MAN, N.B.

Study of the functional state of the thyroid gland in glaucoma  
using the radioiodine indication method; preliminary report.  
Med. zhur. Uzb. no.6:18-20 Je'63  
(MIRA 17:3)

1. Iz glaznogo otdeleniya klinicheskoy bol'nitsy neotlozhnoy  
pomoshchi (glavnyy vrach - T.Sh. Alimov) i laboratoriil endo-  
micheskogo zoba (zav. - doktor med. nauk R.K. Islambekov)  
Instituta krayevoy eksperimental'noy meditsiny AMN SSSR.

L 18156-63

EWT(1)/BDS/ES(w)-2

AFFTC/ASD/IJP(C)/SSD  
S/0048/63/027/008/1018/1021

ACCESSION NR: AP3004490

58

AUTHOR: Beygman, I.; Vaynshteyn, L.

59

TITLE: Empirical formulas for excitation and ionization cross sections /Report presented at the Second All-Union Conference on the Physics of Electronic and Atomic Collisions held in Uzhgorod 2-9 Oct 1962/

SOURCE: AN SSSR, Izvestiya, ser.fiz., v.27, no.8, 1963, 1018-1021

TOPIC TAGS: ionization cross section , excitation cross section , electron-atom encounter , plasma

ABSTRACT: Owing to the fact that often direct measurement of the cross sections for excitation and ionization is difficult, it is frequently necessary to have recourse to empirical formulas. While these may be approximate, usually they are sufficiently accurate for evaluating processes in plasmas. The requirements are that the formula must yield values of the correct order of magnitude and a realistic energy dependence. The interaction considered (except in one case) is collision of electrons with atoms. The basic general formula given by most authors for the cross section is

Card 1/2

L 18156-63

ACCESSION NR: AP3004490

$\sigma = \pi a_0^2 \frac{b}{(\Delta e)^3} \Phi(u)$ ,  
where  $\pi a_0^2 = 0.878 \times 10^{-16} \text{ cm}^2$ ,  $\Delta e$  is the excitation or ionization threshold energy  
in Rydbergs, and  $u$  is the energy of the incident electron in threshold units:

$$u = \frac{E_0}{\Delta E} = \frac{E_1 + \Delta E}{\Delta E} \quad (2)$$

Reasonable values for the parameter  $b$  are given for different cases. Then the forms of the function  $\Phi(u)$  are discussed. The expressions given for this function by different authors are noted, and their regions of applicability are indicated. Finally, expressions are adduced for the average transition frequency for a Maxwellian distribution, for in many practical applications the transition frequency is more useful than the cross section. At the end a cross section formula for atomic encounters with heavy particles (for example, protons) is adduced. Orig.art. has: 16 formulas and 1 table.

ASSOCIATION: Fizicheskiy institut im.P.I.Lebedeva Akademii Nauk SSSR (Physical Institute, Academy of Sciences, SSSR)

SUBMITTED: OO

DATE ACQ: 26Aug63

ENCL: OO

SUB CODE: PH

NO REF Sov: 004

OTHER: OO

Card 2/2

BEYGMAN, L.B., inzhener.

Discounts and premiums for peat according to moisture content. Elek.sta.  
24 no.9:21-22 S '53. (MLRA 6:8) (Peat)

6.4700

S/194/62/000/005/137/157  
D271/D308

AUTHOR: Beygman, M.

TITLE: Technical operation of radar stations and reliability problems

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 5, 1962, abstract 5-7-152 zh (Inform. sb. Tsentr. n.-i in-t morsk. flota, 1961, no. 62, 16-19)

TEXT: Technical evaluation of Soviet marine radar stations is given fundamental deficiencies of each type are listed and desiderata are put forward regarding failure-proof operation, increased reliability and standardization of power units. [Abstractor's note: Complete translation].

✓

Card 1/1

BEYGUL, P.D., inzh.; VINYARSKIY, I.M., mekhanik

Using a vacuum pump for feeding cement into a bunker of a concrete plant. Transp.stroi. 13 no.9:66 S '63. (MIRA 16:12)

L 24278-66 EWT(d)/T/EWP(1) IJP(c)  
ACC NR:AR6005246

SOURCE CGDE: UR/0058/65/000/009/H012/H012

AUTHORS: Aleksakov, G. N.; Beygul, V. P.

TITLE: Method for the conversion of a rotation angle into a digital code

SOURCE: Ref. zh. Fizika, Abs. 9Zh86

REF. SOURCE: Sb. Nekotoryye vopr. nadezhnosti elementov i sistem avtomatiki. M.,  
1964, 69-79

TOPIC TAGS: cyclic coding, computer coding, angle measurement instrument

ABSTRACT: The authors consider a sequential counting converter of the cyclic type,  
based on the use of voltages picked off a selsyn operating as a transformer.  
[Translation of abstract]

SUB CODE 09

40

B

Card 1/1 F

L 25519-66 EWT(d) IJP(c) GG/BB  
ACC NR: AR6009002

SOURCE CODE: UR/0271/65/000/010/B043/B043

AUTHORS: Aleksakov, G. N.; Beygul, V. P.

TITLE: Method of transforming an angle of rotation into a digital code

37

B

SOURCE: Ref. zh. Avtomat. telemekh. i vychisl. tekhn., Abs. 10B373

REF SOURCE: Sb. Nekotoryye vopr. nadezhnosti elementov i sistem  
avtomatiki. M., 1964, 69-79

TOPIC TAGS: analog digital encoder, angle measurement instrument,  
cyclic coding

ABSTRACT: The authors consider a cyclic-type converter for successive counting, based on the use of voltages picked off a selsyn operating in the transformer mode. Since selsyns have no common point of their three phase winding, it becomes necessary to produce an 'artificial neutral' for the circuit, with the aid of three resistances connected in star. The selsyn is then used to indicate the angle of revolution,

Card

1/2

UDC: 681.142.621

L-25519-66  
ACC NR: AR6009002

and the output voltages of the selsyn yield, after transformation, the digital equivalent of the input quantity. The circuit for converting the output voltages of selsyns into a five-digit cyclic code is described. 8 illustrations. Bibliography, 8 titles. N. S.  
[Translation of abstract]

SUB CODE: 09

Card

2/2

BB

BEYGUL, Ye.I.

Redesign of a railroad derrick crane. Metallurg 8 no.7:23  
J1 '63. (MIRA 16:8)  
(Cranes, derricks, etc.—Design and construction)

"APPROVED FOR RELEASE: 06/08/2000

CIA-RDP86-00513R000205130001-9

BEYGUL, Ye.I.; ROKHLIN, N.A.

Modernizing steel-pouring ladles. Stal' 23 no.10:904-905 O '63.  
(MIRA 16:11)

APPROVED FOR RELEASE: 06/08/2000

CIA-RDP86-00513R000205130001-9"

BELEVTSOV, Ya.N.; BEYGULENKO, I.L.; BETIN, D.I.; BORISENKO, V.G.;  
GUBKINA, N.N.; DZHEDZALOV, A.T.; ZHILKINSKIY, S.I., prof.;  
ZALATA, L.F.; KAZAK, V.M.; MALYUTIN, Ye.I.; MUROMTSEVA, Z.G.;  
NATAROV, V.D., doktor geol.-miner. nauk; PANASENKO, V.N.;  
PITADE, A.A.; RADUTSKAYA, P.D.; SLEKTOR, S.M.; SMIRNOV, D.I.;  
TOKHTUYEV, G.V., kand. geol.-min. nauk; FOMENKO, V.Yu.;  
SLENZAK, O.I., red.izd-va; MATVEYCHUK, A.A., tekhn. red.

[Methodological guide for the geological service for the  
prospecting and mining of Krivoy Rog type deposits] Metodiches-  
koe rukovodstvo dlja razvedochnoi i rudnichnoi geologicheskoi  
sluzhby mestorozhdenii krivorozhskogo tipa. Pod red. IA.N.  
Belevtseva. Kiev, Izd-vo AN USSR, 1963. 395 p.

1. Krivoy Rog. Gornorudnyy institut. 2. Chlen-korrespondent  
AN Ukr.SSR (for Belevtsev).  
(Krivoy Rog Basin--Engineering geology)

(MIRA 16:12)

BEYKINA, A.D.

Certain abnormalities in the development of the flower in the jute  
Corchorus olitorius L. [w.s.i.E.] Bot. zhur. 46 no.3:348-356  
Mr. 61.  
(MIRA 14:3)

1. Vinnitskiy gosudarstvennyy meditsinskiy institut  
(Vinnitsa Province—Jute) (Abnormalities (Plants))  
(Flowers—Morphology)

REYKO, I.V.; KARPENKO, N.F.

A method of devising optimum controls. Publ. AN UkrSSR no. 11:1414-  
1424 '63.  
(MFA 17:12)

I. Institut kibernetiki AN UkrSSR.

L 17720-65 EMT(d)/EPF(n)-2/ENP(1) Pg-4/Pk-4/Pl-4/Po-4/Pq-4/Pu-4/Pae-2/Pb-4  
IJP(c)/SSD/ASD(a)-5/AFMD(p)/AMD/AFETR/AFTC(p)/RAEM(d)/RAEM(i)/ESP(dp)/ESD(t)  
BC/WW

ACCESSION NR: AP4042813

S/0021/64/000/007/0842/0845

AUTHOR: Beyko, I. V.

TITLE: Synthesis of controls with nearly optimal response speed

SOURCE: AN UkrRSR. Dopovidi, no. 7, 1964, 842-845

TOPIC TAGS: control response time, control theory, cybernetics, automation

ABSTRACT: The present paper considers the problem of the control of a system described by the linear differential equations

$$\frac{dx}{dt} = A(t)x + B(t)u,$$

where  $x$ , and  $u$  are  $n$ -vectors and  $A(t)$  and  $B(t)$  are  $n \times n$  matrices. The control vector  $u$  is a function of time and has associated with it an "energy" functional

$$J(u) = \frac{1}{2} \int_0^T \left[ \sum_{i=1}^n u_i^2(\tau) \right] d\tau$$

which measures the quantity of energy expended by the system in the time interval  $[0, T]$ .

Card 1/2

L 17720-65

ACCESSION NR: AP4042815

The author shows how to synthesize controls for the system so that

$$x(t_0) = x^0, \quad x(T) = x^T.$$

and so that the energy functional is minimized over the interval  $[0, T]$ . Orig. art. has:  
21 formulas.

ASSOCIATION: Insty\*tut kiberneticheskij AN URSR (Institute of Cybernetics, AN Ukr SSR)

SUBMITTED: 15Sep63

ENCL: 00

SUB CODE: IE

NO REF SOV: 004

OTHER: 000

Card 2/2

L 33234-65 EMT(d) Pg-4 IJP(c)  
ACCESSION NR: AP5002239

S/0021/64/000/012/1563/1568

AUTHOR: Beyko, I. V.; Karpenko, M. F.

TITLE: Solution of non-linear optimal problems by the method of successive approximations

SOURCE: AN Ukr SSR, Dopovidi, no. 12, 1964, 1563-1568

TOPIC TAGS: control theory, differential equation, linear differential equation, algorithm, approximation

ABSTRACT: The paper considers the design of controls  $u$  for a system operating according to the system of differential equations

$$\frac{dx}{dt} = f(x, u) \quad (x = (x_1, x_2, \dots, x_n), \quad u = (u_1, u_2, \dots, u_r)). \quad (1)$$

The first problem considered concerns determining  $u(t)$  so that  $M(T, u) = \max \{u_i(t)\}$  following boundary condition is satisfied:

$$x(0) = x^0, \quad R(\bar{x}(T)) = \sum_{i=1}^n |x_i(T) - x_i^0|^2 \leq \delta \quad (2)$$

Card 1/2

L 33234-65

ACCESSION NR: AP5D02239

for a given value of time  $T=T_{\min}$ . The second problem involves determining  $u(t)$  so that  $M(T,u)$  is a minimum for a given  $T$ . Both of these problems are solved by variational methods. Algorithms are developed which allow calculation of controls which become increasingly better, in the sense of the two problems defined, as the algorithm proceeds. Orig. art. has: 20 formulas.

ASSOCIATION: Instytut matematyki AN URSR (Mathematics institute, AN URSR)

SUBMITTED: 18Mar64

ENCL: 00 SUB CODE: MA, TE

NO REF Sov: 004

OTHER: 000

Card 2/2

BEYKO, I.V.

Numerical methods of solving certain problems of an optimal  
follow-up. Vych. mat. [Kiev] no. 1:53-67 '65 (MIRA 19:2)

L 4544-66 E/T(d)/EWP(v)/T/EWP(k)/EWP(h)/EWP(l) IJP(c)  
 ACCESSION NR: AF5021957

44,55 44,55 UR/0021/65/000/008/0977/0980

AUTHOR: Beyko, I. V.; Beyko, M. F.

TITLE: Minimization of the functional of the final state of a controlled nonlinear system

SOURCE: AN UkrRSR. Dopovid, no. 8, 1965, 977-980

TOPIC TAGS: automatic control theory, functional equation, nonlinear control system

ABSTRACT: A variational method is used to construct a sequence of controls  $u(t) = (u_1(t), \dots, u_r(t)) \in E(a)$  ( $u(t) \in E(a)$ , such that  $|u_i(t)| \leq a$  for all  $t, i = 1, \dots, r$ ), wherein each succeeding control results in a smaller value of the minimized functional  $I(x(T, u))$  (for specified  $T > 0, a$ ). Here  $x(t, u)$  is the solution of the Cauchy problem for the system

$$\frac{dx}{dt} = f(x, u, t), \quad x = (x_1, \dots, x_n)$$

under the initial conditions  $x(0) = x^0$ . If the right-hand sides of the equations for the control have bounded partial derivatives and the minimized convex functional has a continuous gradient, then the constructed sequence of equations con-

Cord 1/2

09011045

L 4544-66

ACCESSION NR: AP5021957

verges to an extremal control in the case of an arbitrary first approximation.  
This report was presented by Yu. O. Mytropol's'kyy (Yu. A. Mitropol'skiy). Orig.  
art. has: 9 formulas.

ASSOCIATION: Instytut matematyki AN URSR [Institut matematiki AN UkrSSR]  
(Institute of Mathematics, AN UkrSSR)

SUBMITTED: 06Jul64

ENCL: 00  
44,55

SUB CODE: MA, IE

NR REF Sov: 002

OTHER: 000

Card 2/2

L 11616-66 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l) LJP(c)

ACC NR: AP6001088

SOURCE CODE: UR/0041/65/017/006/0104/0110

AUTHOR: Boyko, I. V.

ORG: none

TITLE: Computation of optimal control by the method of successive approximations

SOURCE: Ukrainskiy matematicheskiy zhurnal, v. 17, no. 6, 1965, 104-110

TOPIC TAGS: optimal control, Cauchy problem, differential equation, successive approximation

ABSTRACT: Let  $x(t, u)$  be the solution of the Cauchy problem

$$\frac{dx}{dt} = f(x, u(t), t) \quad (x = x_1, \dots, x_n), \quad (1)$$

$$x(0) = x^0. \quad (2)$$

The author treats the problem of finding a control  $u(t)$  belonging for all  $t$  to the closed bounded convex set  $\Omega(t) \subset E$ , minimizing a given functional  $\Phi(x(T, u))$ . Here  $T > 0$  is a fixed point in time. He derives an iteration formula for a sequence  $u^{(k)}(t)$  converging to the desired control, under certain conditions. It is shown that this sequence also converges to the solution of a minimum time control problem. Orig. art. has: 40 formulas.

SUB CODE: 12/ SUBM DATE: 20Nov64/ ORIG REF: 004/ OTH REF: 001  
Card 1/1

L 33433-66 EWT(d)/T/EWP(1) IJP(c)  
ACC NR: AT6010211

SOURCE CODE: UR/3187/65/000/001/0053/0067

AUTHOR: Beyko, I.V.

ORG: None

41  
B+1

TITLE: Numerical methods for the solution of certain optimum pursuit problems

SOURCE: Kiiev. Universitet. Kafedra vychislitel'noy matematiki. Vychislitel'naya matematika, no.1, 1965, 53-67

TOPIC TAGS: mathematic method, mathematic model, game theory, numeric analysis, optimal control, optimum time control, time optimal control, iteration

ABSTRACT: This paper deals with optimum pursuit control strategies, applying the minimax principle of game theory to systems of differential equations of the pursuit model. In the first section, the optimal pursuit control or guidance strategies,  $u(t)$  for  $x$ ,  $v(t)$  for  $y$ , - which realize the maximin of certain pursuit control norms, are considered, for a pursuit model, described in matrix form by the systems of differential equations:

$$\frac{dx}{dt} = A(t).x + B(t).u + f(t) \quad (1); \quad \frac{dy}{dt} = C(t).y + g(v,t) \quad (2)$$

With the Cauchy solution for (1) and (2) denoted by  $x(t,u)$  and  $y(t,v)$ , and certain convexity, closure and limit conditions on the set  $V$  to which the control strategies  $v(t)$  belong ( $v(t) \in V$ ), - the existence, at a given  $T > 0$  and for any  $v(t)$ , of a control strategy  $u(t)$  fulfilling the condition  $x(T,u) = y(T,v)$  (3) (the tally-ho,

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ACC NR: AT6010211

or necessary encounter condition, abstractor) - is assumed. The introductory problem is: to find, for a chosen  $v(t) \in V$ , a control strategy  $u(t)$ , which would "force" the norm

$\|u\|_1 = \int_0^T (K(t).u(t), u(t)) dt$ , (with  $K(t)$  - a given positive definite matrix) to assume, under condition (3), a minimum value  $M_v$ :

$$M_v = \min_u \|u\|_1 \leq M^* \quad (4)$$

Let now  $v^*(t)$  be such a control strategy, that:  $\max_{v \in V} M_v = M_{v^*} = M^*$  (5);

with this as a point of departure, two problems of optimal control strategy pairs are formulated and solved. Problem 1: To find  $v^*(t)$ ,  $u^*(t)$  fulfilling the condition

$\max_{v \in V} \min_u \int_0^T (K(t).u(t), u(t)) dt = \int_0^T (K(t).u^*(t), u^*(t)) dt = M^*$  (6); and Problem 2: to find  $v^{**}(t)$ ,  $u^{**}(t)$ , fulfilling the condition  $x(T, v^{**}) = y(T, v^{**})$ , and the condition:  $\max_{v \in V} \min_u \|u\|_2 = \|u^*\|_2$  ( $\|u\|_2 = \max_{i,t \in [0,T]} |u_i(t)|$ ) (7)

In Section 2, a non-linear case of the system:

$dx/dt = A(t).v + B(t).u + f(t)$  (8);  $dy/dt = g(y, v, t)$  (9) is discussed.

Section 3 presents methods for the solution of certain pursuit problems based upon the maximin of time. An iterative method is proposed and its convergence condition is found, in form of an inequality constraint on the first iteration vector. Orig. art. has 20 formulas.

SUB CODE: 12/ SUBM DATE: 00/ ORIG RFP: 003  
Card 2/2 ULR

BULGARIA/Chemical Technology. Chemical Products and Their Applications. Ceramics. Glass. Binding Materials. Concrete. - Binding Materials. Concrete and Other Silicate Construction Materials.

Abs Jour : Ref Zhur-Khimiya, No.6, 1959, 20330

Author : Beykov, M.; Toshkov, Ye.  
Inst : Scientific Research Architectural Institute  
Title : Use of Electro-osmosis to Dry and Stabilize Construction Grounds and Concrete.

Orig Pub : Tr. Nauchnoissled. stroit. in-t,  
1955 (1957), I, 231

Abstract : No abstract.

Card : 1/1

14-47

L 4544-66 EWT(d)/EWP(v)/T/EWP(k)/EWP(h)/EWP(l) IJP(c)  
ACCESSION NR: AP5021957

UR/0021/65/000/008/0977/0980

AUTHOR: Beyko, I. V.; Beyko, M. F.

TITLE: Minimization of the functional of the final state of a controlled nonlinear system

SOURCE: AN UkrRSR. Dopovidi, no. 8, 1965, 977-980

TOPIC TAGS: automatic control theory, functional equation, nonlinear control system

ABSTRACT: A variational method is used to construct a sequence of controls  $u(t) = (u_1(t), \dots, u_r(t)) \in E(\alpha)$  ( $u(t) \in E(\alpha)$ , such that  $|u_i(t)| \leq \alpha$  for all  $t$ ,  $i = 1, \dots, r$ ), wherein each succeeding control results in a smaller value of the minimized functional  $I(x(T, u))$  (for specified  $T > 0$ ,  $\alpha$ ). Here  $x(t, u)$  is the solution of the Cauchy problem for the system

$$\frac{dx}{dt} = f(x, u, t), \quad x = (x_1, \dots, x_n)$$

under the initial conditions  $x(0) = x^0$ . If the right-hand sides of the equations for the control have bounded partial derivatives and the minimized convex functional has a continuous gradient, then the constructed sequence of equations con-

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L 4544-66

ACCESSION NR: AP5021957

verges to an extremal control in the case of an arbitrary first approximation.  
This report was presented by Yu. O. Mytropol's'kyy (Yu. A. Mitropol'skiy), Orig.  
art. has: 9 formulas.

ASSOCIATION: Instytut matematyki AN URSR [Institut matematiki AN UkrSSR]  
(Institute of Mathematics, AN UkrSSR)

SUBMITTED: 06 Jul 64

ENCL: 00

SUB CODE: MA, IE

NR REF Sov: 002

OTHER: 000

Card 2/2

KARIMOV, D.Kh.; HEYKUZIYEV, K.

Mixed problem for a hyperbolic equation degenerating at the  
boundary. Nauch. trudy TashGU no.208. Mat. nauki no.23:90-97 '62.

(Boundary value problems)  
(Differential equations)

(MIRA 16:8)

"APPROVED FOR RELEASE: 06/08/2000

CIA-RDP86-00513R000205130001-9

BEYL', S.Ya.

Comparability of readings of pendulum impact testing machines of  
various designs. Trudy VNIIM no. 1:91-112 '48. (MIRA 11:11)  
(Steel--Testing)

APPROVED FOR RELEASE: 06/08/2000

CIA-RDP86-00513R000205130001-9"



GORFIAN, Anatoliy Iosifovich, kand. tekhn. nauk; BEYL', S.Ya.,  
red.

[Unified international system of units; verbatim record  
of a lecture] O edinoi mezhdunarodnoi sisteme edinits;  
stenogramma lektsii. Leningrad, 1963. 33 p.  
(MIRA 17:7)

Condensation of water vapor on hydrophobized cooling surfaces. S. Ya. Beiler, P. A. Rebiner, and N. L. Goldenberg. *Bull. akad. sci. U.R.S.S., Classe sci. tech.* 1946, 1491-5 (in Russian).—Substitution of drop condensation for the usual film condensation of water vapor through adsorptive hydrophobization of the metallic cooling surface in steam turbines may substantially improve the exchange of heat; calcn. leads to a ratio of the rates of drop and film condensation from 1.20 to 1.37 corresponding to intensification of the heat exchange from 3 to 10 times. Effective and stable hydrophobization can be obtained with chemisorbed substances of the type of flotation collectors; the min. amt. necessary is given by

$S/M/S_aN$  where  $S$  = surface area of the condenser,  $S_a$  = min. area of 1 mol. in satd. layer,  $M$  = mol. wt.,  $N$  = Avogadro's no. Expts. were made with an app. of 4 Cu tubes 180 mm. long, 25 mm. in diam., wall thickness 1 mm., with electrically heated outer glass jackets for the water vapor, 9 thermocouples at various levels, stationary water circulation. Observations consisted in detg. the contact angle  $\theta$  by projecting the profile of the drop, the degree of hydrophobization being expressed by  $Z = 1 - \cos \theta$ , with  $Z = 2$  corresponding to the limit of hydrophobization. Before the expts., the metal surface had been degreased with 10% solns. of  $HNO_3$ ,  $NaOH$ , and  $Na_3PO_4$ . Rimisol of spindle oil and naphthenic soap, and mercapto-benzothiazole proved to be the best hydrophobizing agents, as measured by the duration  $t$  of the persistence of the effect (100 hrs.); K amylixanthate is of medium efficiency ( $t = 76$  hrs.); turbine oil is weak (10 hrs.). The transition from film to drop condensation is gradual, there being an intermediate stage of mixed-type condensation before outright hydrophobization is established. The effect of concn. is illustrated by K isobutyryl xanthate: 0.001, 0.01, 0.1, 0.2%,  $t = 0, 10, 75, 80$  hrs.; that is, 0.1% is optimum; initial  $\theta$  were 80, 90, 100, 100. On brass, spontaneous emulsions of mineral oil with acid soaps gave effects lasting 100 hrs.

N. Thon

BEYLERIAN, N.M.

Reaction of potassium persulfate with diethylamine. Report  
No.1. Nauch. trudy Erev. un. 60:143-150 '57. (MIRA 11:8)

1.Kafedra fizicheskoy khimii Yerevanskogo gosudarstvennogo  
universiteta.  
(Diethylamine) (Potassium peroxidisulfate)

CHALTYKYAN, O.A.; BEYLERİAN, N.M.

Oxidation of cuprous chloride by sodium perulfate. Izv. AN Arm.  
SSR khim. nauk 11 no.1:13-22 '58.  
(MIRA 11:6)

1. Yerevanskiy gosudarstvennyy universitet.  
(Copper chlorides) (Sodium sulfates) (Oxidation)

CHALTYKYAN, O.A. BEYLERHAYN, H.M.

Reaction of potassium persulfate with diethylamine. Report  
No.2: Effect of pH of media on the reaction rate. Izv, AN  
Arm.SSR. Khim.nauki 11 no.3:153-158 '58. (MIRA 11:11)

1. Yerevanskiy gosudarstvennyy universitet.  
(Potassium sulfates) (Diethylamine) (Hydrogen ion concentration)

5(4)

## AUTHORS:

Chaltykyan, O. A., Atanasyan, Ye. N., Beyleryan, N. M.,  
Marmaryan, G. A. SOV/76-33-1-7/45

## TITLE:

Reaction Kinetics of Peroxides in Solutions (Kinetika reaktsiy  
perekisey v rastvorakh) III. Reaction Kinetics of Benzoyl  
Peroxide With Diphenylamine (II. Kinetika vzaimodeystviya  
perekisi benzoila s difenilaminom)

## PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 1, pp 36-44 (USSR)

## ABSTRACT:

It was already shown that in a reaction of benzoyl peroxide (I) with secondary aliphatic amines the reaction velocity (RV) increases in proportion with the alkalinity of the amines and the solvent (Ref 1). The reaction mentioned in the title was already investigated by S. P. Gambaryan (Ref 3) as well as by Kh. S. Bagdasar'yan and R. I. Milyutinskaya (Ref 4). The working method of the present case is rather similar to that of the investigations (Ref 4). It was observed (Tables 1,2) that the reaction velocity of (I) with diphenylamine (II) is greatest in benzene solutions; equal in ether and acetone solutions, which is, however, slower than in benzene; i. e. in the reaction of (I) with (II) the influence of the solvent is different from that in the case of aliphatic alkaline

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SOV/76-33-1-7/45

Reaction Kinetics of Peroxides in Solutions. II. Reaction Kinetics of Benzoyl Peroxide With Diphenylamine

secondary amines. If the benzene solutions are diluted (Table 3), the reaction order changes and approaches an order of the second degree (as was observed in reference 4). Determinations of the RV in vinyl acetate solutions at 20, 30, and 40°C showed (Fig 1) that the RV decreases strongly in comparison to the benzene solutions, which may be explained by the formation of free benzoyl radicals. Using an appropriate arrangement (Fig 3), investigations on the absorption of nitrogen oxides (III) in benzene solutions of (I) + (II) at 20° and in acetone solutions at 20, 25, 30, and 40° were carried out. As soon as the initial concentration of (I) and (II) is increased, the absorption velocity of (III) increases in proportion with the concentrations of (I) and (II) (Fig 5). The formation of a free diphenyl nitrogen radical was proved qualitatively by means of concentrated sulfuric acid. The temperature function of the absorption velocity of the (III) by (I) and (II) in acetone solutions is characterized as an exponential function (Figs 6,7). The value found for the activation energy (12.7 kcal) corresponds to that mentioned in reference 4. It is assumed that:

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SOV/76-33-1-7/45

Reaction Kinetics of Peroxides in Solutions. II. Reaction Kinetics of Benzoyl Peroxide With Diphenylamine

1) the reaction between (I) and (II) is a chain reaction proceeding via free diphenyl nitrogen and benzoate radicals; 2) the beginning of the chain formation is based on an elementary reaction between the molecules of (I) and (II); 3) the reaction becomes more complicated as the formation velocity of the benzoate radicals increases. It is stated that, in contrast to the strongly alkaline aliphatic secondary amines, the weakly alkaline (II) splits the (I) homolytically at the peroxide bindings. There are 7 figures, 4 tables, and 7 references, 5 of which are Soviet.

ASSOCIATION: Yerevanskiy gosudarstvennyy universitet (Yerevan State University)

SUBMITTED: May 28, 1957

Card 3/3

CHALTYKYAN, O.A.; BEYLMARYAN, N.M.

Reaction of potassium persulfate with amines in aqueous solutions.  
Report No.5: Kinetics of reactions between potassium persulfate and  
trimethyl- and triethylamine. Izv. AN Arm. SSR. Khim. nauki 13  
no.5:315-323 '60. (MIRA 14:2)

1. Yerevanskiy gosudarstvenny universitet. Kafedra fizicheskoy i  
kolloidnoy khimii.

(Potassium peroxydisulfate) (Triethylamine)  
(Trimethylamine)

CHALTYKYAN, O.A., BEYLMERYAN, H.M.

Kinetics of reactions between potassium persulfate and amines in aqueous solutions. Dokl. AN Arm. SSR 30 no. 4:225-299 '60.  
(MIRA 13:8)

1. Yerevanskiy gosudarstvennyy universitet. Predstavлено akad.  
AN Armyanskoy SSR G. Kh. Bunyatyanom.  
(Potassium sulfate) (Amines) (Chemical reactions, Rate of)

CHALTYKYAN, O.A.; BEYLERIAN, N.M.

Kinetics of the reaction of potassium persulfate with amines in aqueous solutions. Part 4: Reaction of potassium persulfate with amino alcohols. Dokl. AN Arm.SSR 31 no. 2:73-77 '60. (MIRA 13:11)

1. Yerevanskiy gosudarstvennyy universitet. Predstavлено академиком АН Армянской ССР М.А. Тер-Карапетяном. (Potassium sulfates) (Alcohols)

BEYLERIAN, N.M.; CHALTYKYAN, O.A.

Kinetics of reactions of potassium persulfate and amines in aqueous solutions. Part 8: Effect of the nature and structure of the amines on kinetics. Dokl.AN Arm.SSR 31 no.3:147-151 '60.  
(MIRA 13:12)

1. Yerevanskiy gosudarstvennyy universitet. Prestavleno akademikom AN Armyanskoy SSR G.Kh.Bunyatyanom.  
(Potassium sulfates) (Amines)

CHALTYKYAN, O.A.; BEYLERIAN, N.M.

Reaction kinetics of potassium persulfate with amines in aqueous solutions. Report No.7: Effect of alkali on the kinetics of the persulfate - amino alcohols reaction. Izv.AN Arm.SSR.Khim.nauki 14 no.1:7-14 '61. (MIRA 15:5)

1. Yerevanskiy gosudarstvennyy universitet, problemnaya laboratoriya fiziko-khimii polimerov.  
(Potassium peroxydisulfate) (Alcohols)

CHALTYKYAN, O.A.; BEYLERIAN, N.M.

Kinetics of the reactions of potassium persulfate with amines  
in aqueous solutions. Report No.9: Effect of cations on the  
kinetics of the reaction persulfate - diethylamine. Izv.AN  
Arm.SSR. Khim.nauki 14 no.3:197-207 '61. (MIRA 14:9)

1. Yerevanskiy gosudarstvennyy universitet, kafedra fizicheskoy i  
kolloidnoy khimii.  
(Peroxymonosulfates) (Diethylamine) (Cations)

CHALTYKYAN, O.A.; BEYLERIAN, N.M.

Kinetics of the reaction of potassium persulfate with amines in aqueous solutions. Report No.10: Effect of Cu and Ag cations on the kinetics of the reaction persulfate - amino alcohols. Izv.AN Arm.SSR. Khim.nauki 14 no.3:209-216 '61. (MIRA 14:9)

1. Yerevanskiy gosudarstvennyy universitet, kafedra fizicheskoy i kolloidnoy khimii.  
(Peroxymonosulfates) (Alcohols) (Cations)

CHALTYKYAN, O.A.; BEYLERIAN, N.M.; CHORANYAN, M.S.; SARUKHANYAN, E.R.

Investigating the kinetics of persulfate - amines reactions  
in aqueous solutions. Report No.12: Study of the kinetics of  
colamine and pyridine oxidation with potassium persulfate in the  
presence of silver ions. Izv.AN Arm.SSR.Khim.nauki 14 no.4:293.  
302 '61.

(MIRA 14:10)

1. Yerevanskiy gosudarstvennyy universitet, kafedra fizicheskoy  
khimii i problemnaya laboratoriya kinetiki polimerizatsionnykh  
protsessov.

(Ethanol) (Pyridine) (Oxidation)

S/171/62/015/005/008/008  
E073/E135

AUTHOR: Beyleryan, N.M.

TITLE: Professor O.A. Chaltykyan (On the occasion of his 60th birthday)

PERIODICAL: Akademiya nauk Armyanskoy SSR. Izvestiya. Seriya khimicheskikh nauk. v.15, no.5, 1962, 495-496

TEXT: On December 4th, 1962, Doctor of Chemical Sciences, Professor Oganes Akopovich Chaltykyan celebrated his 60th birthday and 35 years of scientific teaching activity. Of great importance is his work on the kinetics of acetylene dimerisation, and a monograph "Kuprokataliz" (Cuprocatalysis) will be published in 1963. Also of importance is his work on decomposition of peroxides under the influence of hydrogen-containing compounds. He started working in this field in 1925 under the direction of Professor S.P. Gambaryan. There is 1 photograph.

Card 1/1

BEYLERIAN, N.M.; CHALTYKYAN, O.A.; GUKASYAN, T.T.

Kinetics of the reaction persulfate - diethylethanolamine.  
Dokl. AN Arm. SSR 35 no.1:37-40 '62. (MIRA 15:8)

1. Yerevanskiy gosudarstvennyy universitet. Predstavлено  
академиком АН Армянской ССР Г.Х.Бунятыаном.  
(Ethanol) (Potassium peroxydisulfate) (Amines)